Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for diagnosing prostate cancer versus benign prostate hyperplasia ~~aiding a prostate cancer diagnosis~~, the method comprising:

i. obtaining from a subject a sample containing a plurality of prostrate related protein markers having apparent molecular weights below 10,000 Da;

ii. determining by mass spectroscopy a test amount of the plurality of protein markers in the sample, the protein markers having an apparent molecular weight of less than 10,000 Da;

iii. comparing the test amount of the plurality of protein markers having apparent molecular weight of less than 10,000 Da with an amount of a plurality of protein markers having an apparent molecular weight of less than 10,000 Da from a control sample where the control sample originates from benign prostate hyperplasia;

and

iv. determining whether the test amount is a diagnostic amount consistent with a diagnosis of prostate cancer versus benign prostate hyperplasia.

Claims 2-7 (canceled)

8. (original) The method of claim 1, wherein the sample is selected from the group consisting of blood, serum, urine, semen, seminal fluid, seminal plasma, and tissue extracts.

Claims 9-11 (canceled)

12. (previously presented) The method of claim 1, the method further comprising:

(a) generating data on the sample with the mass spectrometer indicating intensity of signal for mass/charge ratios;

(b) transforming the data into computer-readable form; and

(c) operating a computer to execute an algorithm, wherein the algorithm determines closeness-of-fit between the computer-readable data and data indicating a diagnosis of prostate cancer or a negative diagnosis.

Claims 13-19 (canceled)

20. (previously presented) The method of claim 1, wherein the sample is seminal plasma.

Claims 21-83 (canceled)

84. (previously presented) The method of claim 1 where the protein markers are adsorbed onto a probe comprising an adsorbent of a hydrophilic polymer.

85. (previously presented) The method of claim 1 where the protein markers are adsorbed onto a probe comprising a metal binding group.

86. (previously presented) The method of claim 84 where the adsorbent comprises a hydrophobic group.

87. (previously presented) The method of claim 84 where the adsorbent comprises a cationic group.

88. (previously presented) The method of claim 84 where the adsorbent comprises a metal ion chelating group.

89. (new) The method of claim 20, the method further comprising:

(a) generating data on the sample with the mass spectrometer indicating intensity of signal for mass/charge ratios;

(b) transforming the data into computer-readable form; and

(c) operating a computer to execute an algorithm, wherein the algorithm determines closeness-of-fit between the computer-readable data and data indicating a diagnosis of prostate cancer or a negative diagnosis.

90. (new) The method of claim 20 where the protein markers are adsorbed onto a probe comprising an adsorbent of a hydrophilic polymer.

91. (new) The method of claim 20 where the protein markers are adsorbed onto a probe comprising a metal binding group.

92. (new) The method of claim 90 where the adsorbent comprises a hydrophobic group.

93. (new) The method of claim 90 where the adsorbent comprises a cationic group.

94. (new) The method of claim 90 where the adsorbent comprises a metal ion chelating group.